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**PATENT**  
**Customer No. 22,852**  
**Attorney Docket No. 05725.1478-00000**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re National Stage of International	)	
Application No. PCT/FR2003/03710 of:	)	
	)	Confirmation No.: 9422
Xavier BLIN	)	
	)	Group Art Unit: 1645
Application No.: 10/538,782	)	
	)	Examiner: Not Yet Assigned
PCT Filed: December 12, 2003	)	
	)	
35 U.S.C. §371 date: June 10, 2005	)	
	)	
For: NON-TRANSFER COSMETIC	)	
COMPOSITION COMPRISING A	)	
DISPERSION OF A GRAFTED ETHYLENIC	)	
POLYMER	)	

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**REQUEST FOR CORRECTED PATENT APPLICATION**  
**PUBLICATION UNDER 37 C.F.R. § 1.221(b)**

The U.S. Patent and Trademark Office published the above-identified Application No. 10/538,782 as Publication No. US 2006/0134034, on June 22, 2006. The published application contains mistakes that are the fault of the Office and may be material. Attached hereto is a copy of the relevant pages of the originally filed application and a marked-up copy of the corresponding pages of the published application containing the mistakes.

A mistake is material when it affects the public's ability to appreciate the technical disclosure of the patent application publication or determine the scope of the provisional rights that an applicant may seek to enforce upon issuance of a patent. See C.F.R. § 1.221(b). The mistakes, which are indicated in red ink on the relevant pages of the marked-up copy of the

published application attached hereto, are as follows:

On page 7, paragraph [0147], "R<sub>11</sub>" should read -- R'<sub>1</sub> --.

On page 7, paragraph [0148], "R<sub>12</sub>" should read -- R'<sub>2</sub> --.

On page 18, claim 53, "R<sub>11</sub>" should read -- R'<sub>1</sub> --.

On page 18, claim 53, "R<sub>12</sub>" should read -- R'<sub>2</sub> --.

As the identified mistake affects the scope of the claims or the public's ability to determine the same, Applicants request that the Office correct the above-identified material mistakes in the published application, which are the fault of the Office. Further, Applicants request that the Office forward a copy of the corrected published application or at least a notification of the occurrence or predicted occurrence of the corrected publication once it has been corrected.

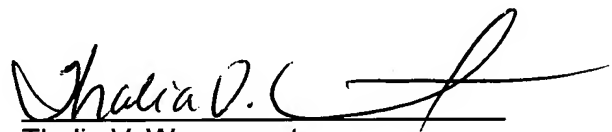
Applicants believe that no Petition or fee is due in connection with this Request. However, if any Petition or fee is due, please grant the Petition and charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: August 22, 2006

By:

  
Thalia V. Warnement  
Reg. No. 39,064

Enclosures:

- Marked-up copies of pages 7 and 18 of the published application; and
- Corresponding pages of the originally filed application.

modified with fatty acids (especially of  $C_8$ - $C_{20}$ ), fatty alcohols (especially of  $C_8$ - $C_{20}$ ) or polyoxyalkylenes (especially polyoxyethylene and/or polyoxypropylene); amino polysiloxanes; polysiloxanes containing hydroxyl groups; fluoro polysiloxanes comprising a fluorinated group that is pendent or at the end of a silicone chain, containing from 1 to 12 carbon atoms, all or some of the hydrogen atoms of which are replaced with fluorine atoms; and mixtures thereof.

46. Composition according to one of the preceding claims, characterized in that the liquid fatty phase contains less than 50% by weight of non-silicone-based liquid organic compounds.

47. Composition according to claim 29 or 46, characterized in that the non-silicone-based organic liquid compound having a total solubility parameter according to the Hansen solubility space of less than or equal to  $18 \text{ (MPa)}^{1/2}$  is selected from carbon-based oils, hydrocarbon-based oils and fluoro oils, alone or in a mixture; linear, branched and/or cyclic alkanes, optionally volatile; esters, and especially linear, branched or cyclic esters having at least 6 carbon atoms; ketones, and especially ketones having at least 6 carbon atoms; ethers, and especially ethers having at least 6 carbon atoms.

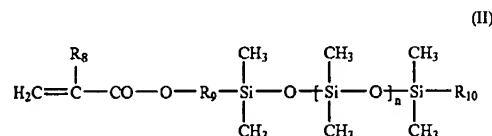
48. Composition according to claim 29, characterized in that the monoalcohols having a total solubility parameter according to the Hansen solubility space of less than or equal to  $20 \text{ (MPa)}^{1/2}$  are selected from aliphatic fatty monoalcohols having 6 to 30 carbon atoms, the hydrocarbon chain containing no substitution group, and especially oleyl alcohol, octyldodecanol, decanol and linoleyl alcohol.

49. Composition according to claims 40 to 45, characterized in that the liquid fatty phase contains no non-silicone-based liquid organic compounds.

50. Composition according to one of claims 6 and 40 to 48, characterized in that the macromonomer is a silicone-based macromonomer.

51. Composition according to claim 50, characterized in that the silicone-based macromonomer is an organopolysiloxane macromonomer, preferably a polydimethylsiloxane macromonomer.

52. Composition according to claim 50 or 51, characterized in that the silicone-based macromonomer is selected from the macromonomers of formula (II) below:



in which  $R_8$  denotes a hydrogen atom or a methyl group;  $R_9$  denotes a divalent hydrocarbon group having from 1 to 10 carbon atoms and optionally contains one or two ether bonds  $-\text{O}-$ ;  $R_{10}$  denotes an alkyl group having from 1 to 10 carbon atoms, in particular from 2 to 8 carbon atoms;  $n$  denotes an integer ranging from 1 to 300, preferably ranging from 3 to 200 and preferentially ranging from 5 to 100.

53. Composition according to claim 5 and either of claims 50 to 51, characterized in that the grafted acrylic polymer is obtainable by free-radical polymerization in the polymerization medium:

of a main acrylic monomer selected from  $C_1$ - $C_3$  alkyl (meth)acrylates, alone or in a mixture, and optionally one or more additional acrylic monomers selected from acrylic acid, methacrylic acid and alkyl (meth)acrylates of formula (I):



in which:

$R'_1$  denotes a hydrogen atom or a methyl group;  
 $R'_2$  represents

a linear or branched alkyl group containing from 1 to 6 carbon atoms, the said group containing in its chain one or more oxygen atoms and/or containing one or more substituents selected from  $-\text{OH}$ , halogen atoms (F, Cl, Br, I) and  $-\text{NR}'\text{R}''$ , where  $R'$  and  $R''$ , which are identical or different, are selected from  $C_1$ - $C_3$  linear or branched alkyls;

a cyclic alkyl group containing from 3 to 6 carbon atoms, it being possible for the said group to contain in its chain one or more oxygen atoms and/or to contain one or more substituents selected from OH and halogen atoms (F, Cl, Br, I);

and salts thereof, to form the said insoluble skeleton;

and of a silicone-based macromonomer.

54. Composition according to the preceding claim, characterized in that  $R'_2$  denotes a group selected from methoxyethyl, ethoxyethyl, trifluoroethyl, 2-hydroxyethyl, 2-hydroxypropyl, dimethylaminoethyl, diethylaminoethyl and dimethylaminopropyl groups.

55. Composition according to claim 50 or 51, characterized in that the main acrylic monomer is selected from methyl (meth)acrylate, ethyl (meth)acrylate, n-propyl (meth)acrylate, isopropyl (meth)acrylate and mixtures thereof.

56. Composition according to claim 50, characterized in that the main acrylic monomer is selected from methyl acrylate, methyl methacrylate, ethyl acrylate and mixtures thereof.

57. Composition according to one of claims 50 to 53, characterized in that the additional acrylic monomer is selected from (meth)acrylic acid, methoxyethyl (meth)acrylate, ethoxyethyl (meth)acrylate, trifluoroethyl methacrylate, dimethylaminoethyl methacrylate, diethylaminoethyl methacrylate, 2-hydroxypropyl (meth)acrylate, 2-hydroxyethyl (meth)acrylate and salts thereof.

58. Composition according to the preceding claim, characterized in that the additional acrylic monomer is selected from acrylic acid and methacrylic acid.

59. Composition according to claim 49, characterized in that the macromonomer is selected from polydimethylsiloxanes containing a mono(meth)acrylate end group, and especially monomethacryloyloxypropyl polydimethylsiloxanes.

60. Composition according to one of claims 5 and 37 to 56, characterized in that the grafted acrylic polymer is selected from the polymers obtained by polymerization:

[0140] of a main acrylic monomer chosen from  $C_1$ - $C_3$  alkyl (meth)acrylates, alone or as a mixture, and optionally of one or more additional acrylic monomers chosen from acrylic acid, methacrylic acid and alkyl(meth)acrylates of formula (I) defined below, and salts thereof, to form the said insoluble skeleton; and

[0141] of at least one silicone-based macromonomer comprising a polymerizable end group, as defined previously.

[0142] Main acrylic monomers that may be used include methyl acrylate, methyl methacrylate, ethyl acrylate, ethyl methacrylate, n-propyl acrylate, n'-propyl methacrylate, isopropyl acrylate and isopropyl methacrylate, and mixtures thereof.

[0143] Methyl acrylate, methyl methacrylate and ethyl methacrylate are most particularly preferred.

[0144] The additional acrylic monomers may be chosen from:

[0145] (meth)acrylic acid and its salts,

[0146] the (meth)acrylates of formula (I), and salts thereof:



in which:

[0147]  $\text{R}'_1$  denotes a hydrogen atom or a methyl group;

[0148]  $\text{R}'_2$  represents

[0149] a linear or branched alkyl group containing from 1 to 6 carbon atoms, the said group comprising in its chain one or more oxygen atoms and/or comprising one or more substituents chosen from

[0150] —OH, halogen atoms (F, Cl, Br or I) and —NR'R'', with R' and R'', which may be identical or different, being chosen from linear or branched  $C_1$ - $C_3$  alkyls;

[0151] a cyclic alkyl group containing from 3 to 6 carbon atoms, the said group possibly comprising in its chain one or more oxygen atoms and/or possibly comprising one or more substituents chosen from OH and halogen atoms (F, Cl, Br or I);

[0152] and mixtures thereof.

[0153] Examples of  $\text{R}'_2$  that may be mentioned include the methoxyethyl, ethoxyethyl, trifluoroethyl; 2-hydroxyethyl, 2-hydroxypropyl, dimethylaminoethyl, diethylaminoethyl and dimethylaminopropyl groups.

[0154] Among these additional acrylic monomers, mention may be made most particularly of (meth)acrylic acid, methoxyethyl or ethoxyethyl (meth)acrylates; trifluoroethyl methacrylate; dimethylaminoethyl methacrylate, diethylaminoethyl methacrylate, 2-hydroxypropyl methacrylate, 2-hydroxyethyl methacrylate, 2-hydroxypropyl acrylate and 2-hydroxyethyl acrylate, the salts thereof, and mixtures thereof.

[0155] Acrylic acid and methacrylic acid are most particularly preferred.

[0156] The macromonomers comprise at one of the ends of the chain a polymerizable end group capable of reacting during the polymerization with the acrylic monomers and optionally the additional vinyl monomers, to form the side chains of the grafted ethylenic polymer. The said polymerizable end group may in particular be a vinyl or (meth)acrylate (or (meth)acryloyloxy) group, and preferably a (meth)acrylate group.

[0157] The macromonomers are preferably chosen from macromonomers whose homopolymer has a glass transition temperature ( $T_g$ ) of less than or equal to  $25^\circ\text{C}$ ., especially ranging from  $-100^\circ\text{C}$ . to  $25^\circ\text{C}$ . and preferably ranging from  $-80^\circ\text{C}$ . to  $0^\circ\text{C}$ .

[0158] The macromonomers have a weight-average molecular mass of greater than or equal to 200, preferably greater than or equal to 300, preferentially greater than or equal to 500, and more preferentially greater than 600.

[0159] Preferably, the macromonomers have a weight-average molecular mass ( $M_w$ ) ranging from 300 to 100 000, preferably ranging from 500 to 50 000, preferentially ranging from 800 to 20 000, more preferentially ranging from 800 to 10 000, and more preferentially still ranging from 800 to 6000.

[0160] In the present patent application, the weight-average ( $M_w$ ) and number-average ( $M_n$ ) molar masses are determined by liquid gel permeation chromatography (THF solvent, calibration curve established with linear polystyrene standards, refractometric detector).

[0161] Carbon-based macromonomers that may in particular be mentioned include:

[0162] (i) linear or branched alkyl acrylate or methacrylate  $C_8$ - $C_{22}$  homopolymers and copolymers having a polymerizable end group selected from vinyl or (meth)acrylate groups, among which mention may be made in particular of: poly(2-ethylhexyl acrylate) macromonomers with a mono(meth)acrylate end group; poly(dodecyl acrylate) or poly(dodecyl methacrylate) macromonomers with a mono(meth)acrylate end group; poly(stearyl acrylate) or poly(stearyl methacrylate) macromonomers with a mono(meth)acrylate end group.

[0163] Such macromonomers are described in particular in the patents EP 895 467 and EP 96 459, and in the article by Gillman K. F., Polymer Letters, Vol 5, page 477-481 (1967).

[0164] Mention may be made in particular of macromonomers based on poly(2-ethylhexyl acrylate) or poly(dodecyl acrylate) with a mono(meth)acrylate end group;

[0165] (ii) polyolefins having an ethylenically unsaturated end group, in particular containing a (meth)acrylate end group. Examples of such polyolefins that may be mentioned in particular include the following macromonomers, it being understood that they have a (meth)acrylate end group: polyethylene macromonomers, polypropylene macromonomers, macromonomers of polyethylene/polypropylene copolymer, macromonomers of polyethylene/polybutylene copolymer, polyisobutylene macromonomers; polybutadi-

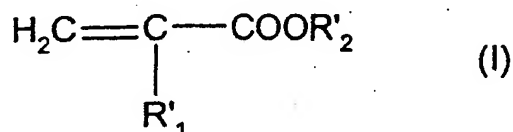
previously.

Main acrylic monomers that may be used include methyl acrylate, methyl methacrylate, ethyl acrylate, ethyl methacrylate, n-propyl acrylate, 5 n'-propyl methacrylate, isopropyl acrylate and isopropyl methacrylate, and mixtures thereof.

Methyl acrylate, methyl methacrylate and ethyl methacrylate are most particularly preferred.

The additional acrylic monomers may be chosen 10 from:

- (meth)acrylic acid and its salts,
- the (meth)acrylates of formula (I), and salts thereof:



15 in which:

- R'<sub>1</sub> denotes a hydrogen atom or a methyl group;
- R'<sub>2</sub> represents

- a linear or branched alkyl group containing from 1 to 6 carbon atoms, the said group comprising in its 20 chain one or more oxygen atoms and/or comprising one or more substituents chosen from

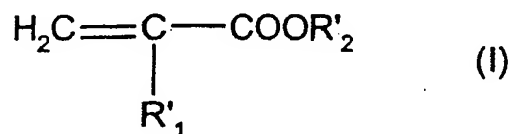
- OH, halogen atoms (F, Cl, Br or I) and -NR'R'', with R' and R'', which may be identical or different, being chosen from linear or branched C<sub>1</sub>-C<sub>3</sub> alkyls;

25 - a cyclic alkyl group containing from 3 to 6 carbon

10 carbon atoms and optionally contains one or two  
 ether bonds -O-;  $R_{10}$  denotes an alkyl group having from  
 1 to 10 carbon atoms, in particular from 2 to 8 carbon  
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 (meth)acrylates, alone or in a mixture, and optionally  
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